43. (Amended) A method for diagnostic purposes comprising using the method according to claim 24.

- 44. (Amended) A method claim 35, wherein said protein or detectable signal allows for testing or screening of aforementioned protein or signal.
- 45. (Amended) A method for treatment of neurological insult, disease, deficit or condition comprising using the method according to claim 24.

#### **REMARKS**

Entry of the foregoing amendments is respectfully requested.

The claim format is modified and multiple dependency is eliminated.

The examination and allowance of the application are respectfully requested.

Respectfully submitted,

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Bv

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Date: July 13, 2001

- 1. (Amended) A method for introducing a substance comprising a nucleic acid into a mammalian neural stem cell or progenitor cell, [characterized in that] wherein said nucleic acid directly interacts with the cell membrane of said cell or a component within said cell membrane in vitro whereby the substance comprising said nucleic acid is taken up by the cell via the inherent transport mechanism of the cell.
- 4. (Amended) A method according to [any one of the claims 1-3] claim 3, wherein said substance [is or] comprises a single or double stranded, linear or circular DNA.
- 5. (Amended) A method according to [any one of the claims 1-3] claim 1, wherein said substance [is or] comprises a single or double stranded RNA.
- 6. (Amended) A method according to [any one of the claims 1-3] <u>claim 1</u>, wherein said substance is a fusion molecule comprising a nucleic acid part and a protein part.
- 7. (Amended) A method according to any [one of the claims 1-3] <u>claim 1</u>, wherein said substance is an expression vector containing specific cDNA.

- 9. (Amended) A method according to [any one of the claims 1-6] claim 1, wherein said substance gives rise to a detectable signal.
- 13. (Amended) A method according to claim 11 [or 12], wherein said detectable signal is due to a radioactively tagged nucleic acid.
- 14. (Amended) A method according to [any one of the claims 1-13] claim 1, wherein said cell is a cell in a tissue or cell culture.
- 15. (Amended) [Use of a] A method [according to any one of the claims 1-14,] for identification of progenitor cells and/or stem cells comprising using the method according to claim 1.
- 16. (Amended) [Use] <u>The method</u> according to claim 15, wherein said cells after identification [is] <u>are</u> isolated from surrounding cells of other types.
- 17. (Amended) [Use of a] A method [according to any one of the claims 1-14,] for gene therapy comprising using the method according to claim 1.

- 18. (Amended) [Use of a] <u>The</u> method according to claim 6 [and 17], wherein said protein part [consists of] <u>comprises</u> a pharmaceutically active protein.
- 19. (Amended) [Use of a] A method [according to claim 8,] for propagation of neural cells comprising using the method according to claim 8.
- 20. (Amended) [Use] <u>The method</u> according to claim 18, wherein said propagated neural cells are suitable for transplantation to patients.
- 21. (Amended) [Use of a] A method [according to any one of the claims 1-14,] for detection of a medicinal product comprising cDNA containing expression plasmids comprising using the method according to claim 1.
- 22. (Amended) [Use of a] A method [according to any one of the claims 1-14,] for diagnostic purposes comprising using the method according to claim 1.
- 23. (Amended) [Use of a] <u>The</u> method according to [any one of the claims 8-13] <u>claim 8</u>, wherein said protein or detectable signal allows for testing or screening of aforementioned protein or signal.

- 24. (Amended) A method for introducing a substance comprising a nucleic acid into a mammalian neural stem cell or progenitor cell, [characterized in that] wherein said nucleic acid directly interacts with the cell membrane of said cell or a component within said cell membrane in vivo, whereby the substance comprising said nucleic acid is taken up by the cell via the inherent transport mechanism of the cell.
- 26. (Amended) A method according to claim 24, wherein said substance [is or] comprises a single or double stranded, linear or circular DNA.
- 27. (Amended) A method according to claim 24, wherein said substance [is or] comprises a single or double stranded RNA.
- 36. (Amended) A method according to [any one of the claims 1-13] claim 1, wherein said cell is a cell in the central nervous system of a patient.
- 37. (Amended) [Use of a] A method [according to claim 24,] for identification of progenitor cells and/or stem cells comprising using the method according to claim 24.
- 38. (Amended) [Use] <u>The method</u> according to claim 37, wherein said cells after identification [is] <u>are</u> isolated from surrounding cells of other types.

- 39. (Amended) [Use of a] A method [according to any one of the claims 24-38] for gene therapy comprising using the method according to claim 24.
- 40. (Amended) [Use of a] A method according to claim 28, wherein said protein part [consists of] comprises a pharmaceutically active protein.
- 41. (Amended) [Use of a] A method [according to claim 30,] for propagation of neural cells comprising using the method according to claim 30.
- 42. (Amended) [Use of a] A method [according to any one of the claims 24-36,] for detection of a medicinal product comprising cDNA containing expression plasmids comprising using the method according to claim 24.
- 43. (Amended) [Use of a] A method [according to any one of the claims 24-36,] for diagnostic purposes comprising using the method according to claim 24.
- 44. (Amended) [Use of a] A method [according to any one of the claims 30-35] claim 35, wherein said protein or detectable signal allows for testing or screening of aforementioned protein or signal.

45. (Amended) [Use of a] A method [according to claim 24,] for treatment of neurological insult, disease, deficit or condition comprising using the method according to claim 24.